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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,159	12/26/2001	Jiandong Shen	CISCP275/5161	9297
22434	7590	09/02/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			RAO, ANAND SHASHIKANT	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/034,159	SHEN ET AL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andy S. Rao	2613	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/31/02</u> | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

*Specification*

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin.

Lin discloses a network device for transmitting compressed video data onto a channel (Lin: column 7, lines 9-20), the network device (Lin: column 7, lines 50-55) comprising: a processing apparatus designed or configured to locate macroblock boundaries in the compressed video data (Lin: column 7, lines 35-40); a rate controller designed or configured to selectively pass through macroblock data in the compressed video data (Lin: column 7, lines 68-67); and a transmitting network interface designed or configured to transmit the compressed video data onto the channel (Lin: column 7, lines 25-30), as in claim 1.

Regarding claim 2, Lin discloses that the macroblock data comprises DCT coefficients included between the macroblock boundaries (Lin: column 1, lines 60-65), as in the claim.

Regarding claim 3, Lin discloses that the processing apparatus is designed or configured to count the number of bits of in a macroblock to locate the macroblock boundaries (Lin: column 7, lines 60-67), as in the claim.

Regarding claim 4, Lin discloses a scheduler, operably coupled to the rate controller, and designed or configured to schedule packets including the compressed data (Lin: column 1, lines 30-57), as in the claim.

Regarding claims 5-6, Lin further discloses a transcoding apparatus, operably coupled to the rate controller, and designed or configured to transcode compressed video data (Lin: column 7, lines 12-16), as in the claims.

Regarding claims 7-9, Lin discloses a receiving network interface designed or configured to receive a bitstream including the compressed video data (Lin: column 7, lines 50-55), as in the claims.

Regarding claims 10-11, Lin discloses an output buffer, operably coupled to the transmitting network interface and operably coupled to the processing apparatus, that stores the compressed video data (Lin: column 7, lines 17-20), as in the claims.

Lin discloses a method (Lin: column 15, lines 55-67) for transmitting compressed video data over a channel (Lin: column 7, lines 48-51), the method comprising: receiving a bitstream including the compressed video data (Lin: column 15-20); locating macroblock boundaries in the compressed video data (Lin: column 7, lines 35-40); selectively passing through macroblock data in the compressed video data defined by the macroblock boundaries (Lin: column 7, lines 60-67); and transmitting the compressed video data onto the channel (Lin: column 7, lines 27-32), as in claim 12.

Regarding claim 13, Lin discloses locating the macroblock boundaries comprises parsing the compressed video data (Lin: column 9, lines 49-64), as in the claim.

Regarding claim 14, Lin discloses that locating the macroblock boundaries comprises counting the number of bits from the start of a macroblock to the end of a macroblock (Lin: column 7, lines 60-67), in the claim.

Regarding claim 15, Lin discloses partial decoding of motion vectors and mode info included in a macroblock (Lin: column 9, lines 8-49), as in the claim.

Regarding claim 16, Lin discloses comprising selectively passing through picture data in the compressed video data defined by picture boundaries (Lin: column 7, lines 30-40), as in the claim.

Regarding claim 17, Lin discloses selectively passing through the macroblock data defined by the macroblock boundaries comprises block copying the macroblock data from an input buffer to an output buffer (Lin: column 7, lines 10-25).

Regarding claims 18-19, Lin discloses comprising transcoding the video data to produce compressed video data having a lower bit rate (Lin: column 1, lines 50-60), as in the claims.

Lin discloses a network device for transmitting compressed video data onto a channel (Lin: column 10-20), the network device (Lin: column 7, lines 50-55) comprising: a processing apparatus designed or configured to locate picture sub-region boundaries in the compressed video data (Lin: column 7, lines 35-40); a rate controller designed or configured to selectively pass through picture sub-regions in the compressed video data (Lin: column 7, lines 60-67); and transmitting the compressed video data onto the channel (Lin: column 7, lines 20-25), as in claim 20.

Lin discloses a method (Lin: column 15, lines 55-67) for transmitting compressed video data over a channel (Lin: column 7, lines 47-50), the method comprising: receiving a bitstream including the compressed video data (Lin: column 7, lines 15-20); locating picture subregion boundaries in the compressed video data (Lin: column 7, lines 35-40); selectively passing through picture sub-regions in the compressed video data (Lin: column 7, lines 60-67); and a network interface designed or configured to the compressed video data onto the channel (Lin: column 7, lines 10-25), as in claim 21.

Regarding claim 22, Lin discloses the video data is compressed according to an MPEG standard (Lin: column 2, lines 55-60), as in the claim.

Regarding claim 23, Lin discloses selectively passing through slice data in the compressed video data defined by slice boundaries (Lin: column 7, lines 35-45), as in the claim.

Lin discloses a network device (Lin: figures 14A-14B) for transmitting compressed video data over a channel (Lin: column 7, lines 47-51), the system comprising: means for receiving a bitstream including the compressed video data (Lin: column 7, lines 10-15); means for locating macroblock boundaries in the compressed video data (Lin: column 7, lines 35-40); means for selectively passing through macroblock data in the compressed video data defined by the macroblock boundaries (Lin: column 7, lines 60-67); and means for transmitting the compressed video data onto the channel (Lin: column 7, lines 20-25), as in claim 24.

Regarding claim 25, Lin discloses means for locating the macroblock boundaries comprises means for parsing the compressed video data (Lin: column 9, lines 49-65), as in the claim.

Regarding claim 26, Lin discloses means for transcoding the video data to produce compressed video data having a lower bit rate (Lin: column 1, lines 50-55), as in the claim.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Apostolopoulos.



Lin discloses receiving a bitstream including the compressed video data over a channel (Lin: column 7, lines 47-51) by using instructions for locating macroblock boundaries in the compressed video data (Lin: column 7, lines 35-40), by using instructions for selectively passing through macroblock data in the compressed video data defined by the macroblock boundaries (Lin: column 7, lines 60-65), and by using instructions for transmitting the compressed video data onto the channel (Lin: column 7, lines 10-25), as in claim 27. However, Lin fails to disclose that the executed instructions are stored on a computer readable medium as in the claim.

Apostolopoulos discloses that it is known to store instructions for transcoding a received bitstream on a computer readable medium in the form of a software program codes in order to have both the received bitstream and the transcoder downloadable across a network (Apostolopoulos: column 17, lines 58-67; column 18, lines 1-19). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art incorporate the Apostolopoulos teaching into the Lin method by having the Lin instructions stored on a computer readable medium in order to have the Lin transcoding method downloadable over the network. The Lin method, now implemented as instructions contained on a computer readable medium, has all of the features of claim 27.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bakhmutsky discloses a macroblock level portioned HDTV video decoder and related method. Wee discloses a compressed video signal including independently coded regions. Vetro

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discloses a method for encoding and transcoding multiple video objects with variable temporal resolution.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao

Primary Examiner

Art Unit 2613

ANDY RAO  
PRIMARY EXAMINER

asr

September 1, 2004